

Environmental Assessment
and
Finding of No Significant Impact (FONSI)
for the
Barber Debris Temporary Handling Facility
2018 California Wildfires

Prepared by the
United States Army Corps of Engineers

In Coordination with the
Federal Emergency Management Agency

December 4, 2018

FINDING OF NO SIGNIFICANT IMPACT (FONSI) (33 CFR §§ 230-325)

Barber Temporary Debris Handling Facility Environmental Assessment

1. **Introduction:** The United States Army Corps of Engineers (USACE) is proposing to utilize the Barber Industrial Site as a debris handling facility to stage, sort, process, and transfer non-hazardous debris generated from the 2018 Camp Wildfires. The Barber Industrial Site is located in the City of Chico, Butte County, California. The USACE has prepared an environmental assessment to comply with the National Environmental Policy Act (NEPA; 42 U.S.C. § 4321, *et seq.*) and associated regulations (e.g., 40 C.F.R. §§ 1500-1508, USACE Engineer Regulation [ER] 200-2-2).
2. **Action:** The project proposes to utilize the Barber Industrial Site as debris handling facility to stage, reduce, and trans-load non-hazardous fire-related debris from the Town of Paradise and the surrounding communities. It is Barber Industrial Site would be limited to non-hazardous concrete and masonry, vehicles, and other metals. It is anticipated that approximately 3 million tons of debris would be processed through the Barber Industrial Site. Debris would be staged onsite and reduced such that it could be recycled or disposed. Debris would be loaded on trains or trucks and transferred to its final disposition, either to be recycled or disposed.
3. **Factors Considered:** Factors considered for this FONSI were direct, indirect, and cumulative impacts on soil quality; water quality; air quality; noise; traffic; biological resources, including special status species; and cultural and historic resources.
4. **Conclusion:** The proposed Barber debris handling facility would not result in adverse effects to the environment, particularly compared to the no action alternative. While there will be impacts resulting from utilizing the Barber Industrial Site as a debris handling facility, under the no action alternative, the State of California would be required to identify alternative processing and disposal sites that may result in impacts that are greater than those identified in the EA. In addition, avoidance, minimization, and mitigation measures are proposed to further support findings of the EA determination. Pursuant to the provisions of NEPA, the preparation of an Environmental Impact Statement is not required.

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Deputy Commander

Date

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APPENDICIES

- Appendix A:** Presidential Emergency (3409EM) and Disaster Declaration (4407DR) Summaries, State of California Emergency Proclamations (November 8 and 14, 2018), and Butte County Emergency Proclamation
- Appendix B:** California Department of Toxic Substances Control (DTSC). September, 2001. Letter from the California DTSC indicating that, with the 3-acre exception of the asphalt cap, the 133 acres of the 136-acre Barber site is cleaned to residential standards and can be used for residential purposes. The 3-acre asphalt cap can be used for commercial purposes; however, structures cannot be built on the cap.
- Appendix C:** California DTSC. 1995. California Environmental Quality Act Negative Declaration for Louisiana Pacific Corporation, Butte County, California, Remediation of Soil and Groundwater Contamination
- Appendix D:** California DTSC. 1995. De Minimis Impact Finding for Louisiana Pacific Corporation, Butte County, California, Remediation of Soil and Groundwater Contamination
- Appendix E:** Central Valley Regional Water Quality Control Board (RWQCB). 1997. Case Closure, Underground Storage Tank Case No. 04190, L-P Chico Foundry Bunker, West 16th Street, Chico, California and Case Closure, Underground Storage Tank Case No. 04191, L-P Carpentry Bunker, West 16th Street, Chico, California
- Appendix F:** California DTSC. 1999. Covenant to Restrict Use of Property, Environmental Restriction, Louisiana Pacific Corporation – Chico Site (available as Appendix E).
- Appendix G:** United States Fish and Wildlife Service species list was generated on November 24, 2018 (USFWS Information for Planning and Consultation [IPaC])

1.0 Introduction

The United States Army Corps of Engineers (USACE) is proposing to utilize the Barber Industrial Site as a debris handling facility to stage, sort, process, and transfer non-hazardous debris generated from the 2018 Camp Wildfires. The Barber Industrial Site is located in the City of Chico, Butte County, California. The USACE has prepared this environmental assessment to comply with the National Environmental Policy Act (42 U.S.C. § 4321, *et seq.*) and associated regulations (*e.g.*, 40 C.F.R. §§ 1500-1508, USACE Engineer Regulation [ER] 200-2-2).

On November 8, 2018, the Camp Wildfire began burning near Camp Creek Road in Butte, County, California. The fire was the most destructive wildfire in California's history, burning nearly 154,000 acres, claiming 88 lives, and destroying nearly 19,000 structures (including 13,696 single family homes, 276 apartment buildings, and 528 commercial buildings). The fire burned for 17 days, with 100 percent containment occurring on November 25, 2018.

The Camp Wildfire caused significant damage in the Town of Paradise and surrounding areas, resulting in an estimated 8 million tons of fire-related debris. Because of the exigent nature of the requirement to remove debris from the impact area in Butte County and find a suitable place to properly dispose of hazardous material and dispose and/or recycle non-hazardous material, the project proponents are expeditiously looking for suitable sites to accept fire-related debris from the impacted county. Further, the State of California has proclaimed an emergency, declaring that the removal, transportation, and disposal of hazardous and non-hazardous debris from the wildfires is a state priority. The USACE was issued a mission assignment under the Stafford Act by the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) to manage the non-hazardous debris handling operations.

1.1 Federal Declarations and State Proclamations

Presidential Emergency Declaration (3049EM): As a result of the wildfire, the President of the United States issued an emergency declaration (3049EM) under Title V of the Stafford Act providing public assistance to Butte County on November 8, 2018. The emergency declaration also included public assistance for wildfires in Ventura and Los Angeles counties, which are outside the scope of this environmental assessment (Appendix A).

Presidential Disaster Declaration (4407DR): On November 12, 2018, the President issued a disaster declaration (4407DR) as a result of the wildfires in Butte, Ventura, and Los Angeles counties. The declaration provided individual and public assistance to the impacted counties (Appendix A).

State of California Emergency Proclamation: On November 8, 2018, the Acting Governor of California issued a local emergency proclamation in response to the wildfires in Butte County (Appendix A).

State of California Emergency Proclamation: On November 14, 2018, the Governor of California issued a local emergency proclamation in response to the wildfires in Butte, Ventura, and Los Angeles counties. The proclamation lifted compliance with various state statutes and regulations that would “prevent, hinder, or delay the mitigation of the effects of the wildfires.” As such, the Governor suspended all state statutes, rules, regulations and requirements related to the “removal, storage, transportation, and disposal of hazardous and non-hazardous waste and debris resulting from the wildfires...that are subject to the jurisdiction of agencies within the California Environmental Protection Agency and the California Natural Resources Agency” (Appendix A).

Butte County Local Emergency Proclamation: On November 8, 2018, the Chief Administrative Officer issued a local emergency proclamation in response to the wildfires in Butte County. As part of the proclamation, the County of Butte requested that the State of California waive regulations that hinder response and recovery efforts (Appendix A).

1.2 Purpose and Need of the Proposed Project

The NEPA requires identification of the project’s underlying purpose and need (40 C.F.R. 1502.13). The purpose of the project is to find a cost-effective, environmentally acceptable solution to assist the State of California in removing debris from the areas of Butte County affected by the devastating Camp Wildfires. The state has determined that the removal, processing, transportation, and ultimate deposition of the debris is beyond its capacity and has request assistance from the federal government.

The need for the proposed action is to ensure that a debris handling facility is established in a very short timeframe to accommodate the state’s debris removal operation. Further, the facility must be able to accept and process a significant amount of non-hazardous debris while minimizing impacts to the surrounding community.

1.3 Studies and Reports Incorporated by Reference into this Environmental Assessment

The following studies, reports, and letters were used to develop this environmental assessment and are incorporated by reference into this document.

- California Department of Toxic Substances Control (DTSC). September, 2001. Letter from the California DTSC indicating that, with the 3-acre exception of the asphalt cap, the 133 acres of the 136-acre Barber site is cleaned to residential standards and can be used for residential purposes. The 3-acre asphalt cap can be used for commercial purposes; however, structures cannot be built on the cap (included as Appendix B).
- California DTSC. 1995. California Environmental Quality Act Negative Declaration for Louisiana Pacific Corporation, Butte County, California, Remediation of Soil and Groundwater Contamination (included as Appendix C).

- California DTSC. 1995. De Minimis Impact Finding for Louisiana Pacific Corporation, Butte County, California, Remediation of Soil and Groundwater Contamination (included as Appendix D).
- Louisiana-Pacific Corporation. 2018. Draft Five-Year Review 2013 through 2017: Chico Remanufacturing Company (Formerly Diamond Match Company Plant). Prepared by VESTRA Resources Inc. Available at: http://geotracker.waterboards.ca.gov/regulators/deliverable_documents/5555174112/LP%20Chico_Draft%205%20Year%20Review%202013-2017_010318.pdf.
- Louisiana-Pacific Corporation. 2018. Second Semi-Annual 2018 Summary Report; Former Chico Remanufacturing Company. Prepared by VESTRA Resources Inc. Available at: http://geotracker.waterboards.ca.gov/regulators/deliverable_documents/2832039952/LPChico_2SA18%20Monitoring%20Report_101518.pdf.
- Central Valley Regional Water Quality Control Board (RWQCB). 1997. Case Closure, Underground Storage Tank Case No. 04190, L-P Chico Foundry Bunker, West 16th Street, Chico, California (letter; included as Appendix E).
- Central Valley RWQCB. 1997. Case Closure, Underground Storage Tank Case No. 04191, L-P Carpentry Bunker, West 16th Street, Chico, California (letter; included as Appendix E).
- California DTSC. 1999. Covenant to Restrict Use of Property, Environmental Restriction, Louisiana Pacific Corporation – Chico Site (available as Appendix F).

2.0 Project Location, Site History, and Project Description

This section provides a discussion of the project location, site history, and project description. The site history is provided to establish a baseline of the project area and detail the industrial use and cleanup of the site.

2.1 Project Location

The Barber Industrial Site is an approximate 136-acre site located in an area zoned as commercial and light and heavy industrial in the southwestern portion of Chico, Butte County (Figure 1). The site is bound on the north and northeast by residential housing to the north and northeast, industry to the southeast, and agriculture to the east and south. It is bordered along the southwest by the Union Pacific Railroad tracks and has a triple railroad spur immediately adjacent to site. The proximity of the site to an active rail spur allows for transporting large quantities of debris to its final destination while significantly reducing the number of trucks required to transport the debris.

2.2 Barber Site History

The Barber Industrial Site has a long history in the City of Chico. In 1903, the Diamond Match Company purchased approximately 242 acres of land south of the City of Chico, the purchase included the 136-acre Barber Industrial Site. Construction of the site was completed in 1906 and included an engineering department, millworks division, retail yard, and match factory. The factory

was supported by Diamond's logging operating in the forests east of Chico, which were transported to the facility by train. Between 1969 and 1970, Diamond added the Finished Wood Products division to the site and in 1975 the match factory closed. In 1984, Louisiana-Pacific Corporation purchased the site and continued to operate the Finished Wood Product Division and remanufacturing portion of the facility until 1989. In 1999, Mr. Jeff Greening (the current owner) purchased the site. The operations and maintenance of the remedial actions discussed below, however, is the responsibility of Louisiana-Pacific Corporation.

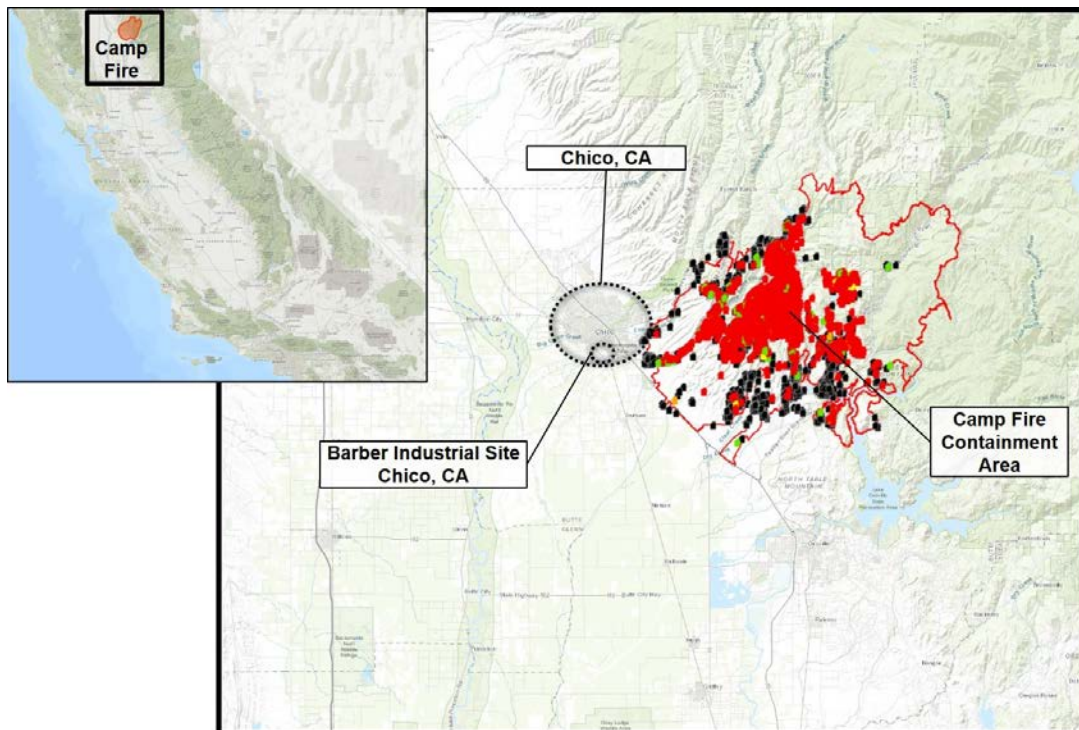


Figure 1. Overview of Camp Wildfire impact area and the Barber Industrial Site.

2.3 Barber Site Soil and Groundwater Remediation History

Compounds used in the remanufacturing process included fungicides and adhesives. A pentachlorophenol (PCP)-based fungicide was used to treat wood products in a dip tank and concrete impoundment. Polyvinyl acetate adhesives were used for fingerjointing and veneering. Other compounds used included solvents, paints, and lacquer thinner. Use of these substances resulted in contamination of soils and groundwater at the site.

In 1991, the California DTSC issued an Imminent and Substantial Endangerment Determination for the property, identifying elevated concentrations of arsenic in soils and pentachlorophenol (PCP) in

groundwater. Arsenic and PCP are considered hazardous substances under Section 25316 of the California Health and Safety Code and hazardous wastes under Section 25117 of the code. Arsenic and PCP are considered carcinogens and are poisonous by ingestion. However, health and human are greatly minimized by eliminating exposure pathways.

Based on the Imminent and Substantial Endangerment Determination, the California DTSC order required the Louisiana-Pacific Corporation to conduct soil removal activities, complete a remedial investigation and feasibility study to support preparation of a remedial action plan, and complete a remedial action plan. The Louisiana-Pacific Corporation complied with the order and completed soil removal activities in 1992, which resulted in the majority of the onsite soil contamination being removed. The soil was removed to meet the human health cleanup levels approved by the California DTSC. Following the remediation, the human health risks were significantly reduced and continue to be mitigated through maintenance of the asphalt cap.

Following the 1992 soil removal, three additional sites were identified for further remediation, including a 1.7-mile area along the railroad track within and adjacent to the Barber site which contained soils contaminated with arsenic, groundwater contamination in the vicinity of the concrete impoundment area, and groundwater contamination in the vicinity of the finished wood products division area (Figure 2). The site remediation is detailed below.

Excavating Soils in the Vicinity of the Finished Wood Products Division

Remediation included removing more than 10,000 cubic yards of soil contaminated with PCP in the vicinity of the Finished Wood Products Division. Specifically, soil was removed from the following locations: fuel oil bunker, new dry kilns, concrete impoundment, detention pond, glue discharge area, paint disposal pit, and south orchard burn dump (Figure 2). Soil removal was completed in 1992 and monitoring occurred until 1998. Since 1998, continued maintenance related to this soil remediation is no longer required.

Excavating Soils along the Rail Road Tracks

Remedial actions included excavating approximately 32,500 cubic yards of soil with arsenic concentrations in excess of 5.4 milligrams per kilogram (mg/kg) beneath the onsite railroad tracks and consolidation of the contaminated soil to a 2-acre onsite location which was capped with asphalt (Figure 3). This action was completed in 1995; however, ongoing maintenance of the asphalt cap is required. A 1999 deed restriction remains in place prohibiting the use of the asphalt capped area without approval from the California DTSC.

Groundwater Pumping and Treating

Pumping and treating pentachlorophenol (PCP) contaminated groundwater to create a capture zone, treating the water with granular activated carbon to concentrations of 1 microgram per liter (µg/l) PCP and discharging the treated water to an onsite dry well. Groundwater extraction, treatment, and monitoring occurred(s) in the vicinity of the concrete impoundment area. The

groundwater extraction and treatment system operated from 1997 through 2003, when the contamination was considered remediated. Since then, quarterly groundwater monitoring has occurred on the site at the groundwater monitoring wells; however, between 2005 and 2011, the number of groundwater wells requiring monitoring was reduced from 21 to only 1, Monitoring Well MW-5a, which is still monitored twice every year. Although the groundwater cleanup was successful, because of the groundwater contamination, a 1999 deed restriction remains in place which prohibiting the use of groundwater without the approval of the California DTSC. The bullets below summarize the groundwater cleanup efforts at the Barber site.

- April 2003. The groundwater cleanup was successful and operation of the groundwater extraction and treatment system was discontinued.
- March 2005. California DTSC approved a monitoring reduction plan to remove monitoring wells from the quarterly groundwater sampling program, immediately reducing the number of monitoring wells included in the quarterly sampling program from 21 to 11.
- October 2006. California DTSC approved a monitoring reduction plan to remove and additional eight monitoring wells from the quarterly groundwater sampling program, reducing the number of wells requiring monitoring to three.
- January 2008. California DTSC approved dismantling the groundwater extraction and treatment system and completely decommission 14 onsite monitoring wells. The groundwater extraction and treatment system was dismantled and removed from site in February 2008, and the 14 monitoring wells were decommissioned in November 2008.
- March 2008. RWQCB adopted Order No. R5-2008-0050 rescinding WDR Order No. 96-240 and allowing LP to re-inject treated water into the underlying aquifer.
- December 2011. California DTSC approved the request to discontinue sampling at two of the remaining three wells, leaving only Monitoring Well MW-5a as an active monitoring well. Monitoring Well MW-5a is a shallow aquifer monitoring well located near the original source area. This well was installed in 1992 and was operated as an extraction well between 1997 and 2003.
- April 2013. The ongoing groundwater monitoring program was reduced to collecting semi-annual samples during the first and third quarters.

Ongoing Remediation Operations and Maintenance Activities

The remediation activities are complete; however, an operation and maintenance agreement between the Louisiana-Pacific Corporation and California DTSC is still in place to ensure continued maintenance of the cap (other operation and maintenance requirements identified in the agreement are no longer required and have been rescinded). As part of the remediation operation

and maintenance agreement between the California DTSC and Louisiana-Pacific Corporation, the Louisiana-Pacific Corporation is required to conduct a review of the remedial actions at the former Chico Remanufacturing Facility every 5 years, pursuant to Section 121 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Since the completion of the remediation activities, Louisiana-Pacific Corporation has completed four 5-year review documents, with the latest draft completed in 2018.



Figure 2. Historic Barber Industrial Site showing where structures were located. Soil arsenic contamination occurred in areas where the train tracks ran. PCB contamination occurred on the southern half of the site near the fuel oil bunker, new dry kilns, concrete impoundment, detention pond, glue discharge area, paint disposal pit, and south orchard burn dump (source: SHN Consulting Engineers & Geologists, as provided in the 2018 draft Five-Year Review 2013 through 2017: Chico Remanufacturing Company)



Figure 3. Historic Barber Industrial Site showing the location of the asphalt cap (yellow). The asphalt cap will be avoided during construction, operation, and restoration of the site. The red line indicates the area where debris removal activities will be conducted. Areas north of 16th street would be used for administrative buildings and light-duty vehicles.

Current Status of the Barber Site

These cleanup levels required were based on the Baseline Human Health Evaluation, which was completed in 1994. Monitoring has indicated that additional remediation at the site is not required. The current residual soil concentrations, other than below the asphalt cap, meet residential criteria, as defined in the record of decision. However, use of the site is predicated on protecting the asphalt cap and prohibiting groundwater extraction. The site is suitable for use as a debris handling site. On November 28, 2018, the USACE met with the California DTSC to discuss use of the site. With the exception of the asphalt cap area, the DTSC agrees that the site is no longer contaminated.

2.4 Project Description

The project proposes to utilize the Barber Industrial Site as debris handling facility to stage, reduce, and trans-load non-hazardous fire-related debris from the Town of Paradise and the surrounding communities. The Barber Industrial Site would be limited to non-hazardous concrete and masonry, vehicles, and other metals. It is anticipated that approximately 3-4 million tons of debris would be processed through the Barber Industrial Site. Debris would be staged onsite and reduced such that it could be recycled or disposed. Debris would be loaded on trains or trucks and transferred to its final disposition, either to be recycled or disposed. To the extent practicable, recyclable debris will be processed for recycling, rather than disposed. Figure 4 provides the conceptual layout of the Barber Industrial Site.

The State of California will be responsible for removing non-hazardous debris from the impacted area and transporting it to the Barber Industrial Site. Prior to transporting the non-hazardous debris to the site, ash would be rinsed from the debris to ensure that ash does not fall from the debris during transport to the disposal site. Once on site, the USACE would be responsible for sorting all debris into appropriate categories (e.g., concrete and masonry, vehicles, and other metals). The section below discusses the anticipated handling for each debris category

- Concrete and masonry: Concrete and masonry would be rinsed of ash prior to transporting it via truck to the Barber site. Once on the site, the debris would be unloaded and staged until processing. Handling (processing) would include crushing the concrete and masonry, trans-loading it onto rail or trucks for transportation to recycling facilities or other approved locations.
- Scrap metal: All scrap metal would be rinsed at the impacted area prior to transporting it to the Barber site. Once at the site, the metal would be appropriately sorted and staged until it is processed. Processing would include shredding the metal and trans-loading it onto rail cars or trucks for transportation to its final disposition site.
- Vehicles: Prior to transporting vehicles to the Barber site, all batteries and liquids would be removed and the vehicles would be rinsed of ash in the impacted areas. Vehicles would be trucked to the Barber site and unloaded in a staging area. Vehicle processing may include shredding, crushing, and/or sizing (cubing) prior to trans-loading.

Prior to establishing the site, the area proposed for debris storage and processing would be grubbed. As necessary, additional gravel or cement may be installed to create hardened surfaces for storing facilities.



Figure 4. Conceptual design of the Barber debris handling facility, including transportation ingress and egress routes.

2.5 Anticipated Debris Transport to the Barber Site

As discussed, it is expected that approximately 3 million tons of debris is expected to be handled at the Barber temporary debris handling facility. Trucks will be carrying approximately 10 to 20 tons of debris, depending on the truck type. This would result in approximately 150,000 truckloads accessing the site over a period of 1 to 2 years. However, transport of debris to the Barber site will be the responsibility of the State of California and the number of truckloads, route(s) to the site, and duration will be driven by the state's debris removal operations.

2.6 Debris Transportation Corridor

As mentioned, the State of California will be responsible for removing debris from the impacted area. During the initial operation stage of the facility, debris would likely be transported to the site through 20th or 16th streets. These streets would be used until the alternative entrance is constructed. It is expected that the initial entrance point could be used for up to 90 days. The

alternative entrance would be located along the south side of the site. The alternative site would provide for debris to be transported to the Barber site via Skyway Road, across Highway 99 to East Park Avenue to Park Avenue, north on Park Avenue to Meyers Street, and onto Ivy Street (Figure 4). A truck entrance and exit point will need to be constructed. The exact location of the entrance/exit site is not yet determined; however, the USACE is currently coordinating with the State of California, Butte County, and the City of Chico to determine the location(s) in the area zoned as heavy industrial. As shown on Figure 4, potential ingress/egress points could include along the power pole right-of-way or across the existing bike path at the end of Ivy Street and across Normal Avenue into the site. The area(s) ultimately used for ingress and egress into the site will be upgraded to facility heavy truck traffic and protect surrounding resources. Once the Barber facility is no longer required, the ingress/egress sites would be restored. In addition, the State of California would develop and utilize traffic control plan to ensure safety of the surrounding community along the transportation corridor. Light-duty vehicles would utilize the 16th street entry and exit point to access the site.

3.0 No Action and Action Alternatives

The NEPA requires analysis of the no action alternative (40 CFR § 1502.14 (d)) and alternatives to the proposed action which meet the basic purpose and need of the project. The USACE investigated additional sites that could serve as a debris handling facility, including the no action. Under the no action alternative, the state would be responsible for identifying debris processing, staging, transport, and disposal sites on its own. This includes finding sites to dispose of both hazardous and non-hazardous wastes. The state has determined that the magnitude of the devastation is beyond its capacity and, therefore, has requested federal assistance to process, transport, and dispose non-hazardous waste. Because of the state's request and the urgency of removing debris from the impacted area, the no action alternative does not meet the purpose and need to facilitate expedient removal of debris and could result in additional adverse effects to public health and safety.

In addition, the USACE investigated additional sites to serve as a debris handling station. While these sites could be used to stage and process debris, significant construction would be required to install a railroad spur to facilitate rail removal of debris and establish an area suitable to handle the amount of debris anticipated. The significant amount of construction could result in significant impacts to the environment and, most importantly, require a significant amount of time to construct the site. The amount of time required to construct these alternative sites would result in an unacceptable delay to the state's debris removal mission. The Barber Industrial Site is already suited to accept and process debris, is adjacent to a railroad spur, and extremely close to the impacted area. Because the Barber site is already suitable, it could be ready to accept and process debris in early January, when the state intends to begin debris removal operations of non-hazardous materials. As such, other locations were considered and dropped from further analysis, including:

- *The Elsey Site.* The Elsey site is located approximately 15 miles from the impacted area along Clark Road in Butte County. It is a small town off the Union Pacific Railway. Elsey is predominately a farming town with a rock quarry. To use the site, land adjacent to the railroad would have to be acquired. In addition, the site would require significant site preparation, including grading and hardening of the land, and a railroad spur would need to be constructed. Construction of the site would require to acquire the site, conduct environmental coordination and documentation, including tribal coordination for grading activities, coordination with Union Pacific, and construction. It is expected that the coordination and construction associated with using this site would take approximately 6 months, which is well beyond the timeframe required to begin removing debris from the impacted area.
- *BCY Sand and Rock Site.* The BCY Sand and Rock site is located off Wheeler and Slickens Road in Butte County (39°38'25.06" N, 121°35'0.42" W). The site is a defunct quarry site that is already impacted by rock mining activities. The site is approximately 1.2 miles from the Union Pacific Railway and not adjacent to a rail spur. Similar to the Elsey site, a rail spur would need to be constructed. Construction of the site would require to acquire the site, conduct environmental coordination and documentation, coordination with Union Pacific, and construction. It is expected that it would take approximately 6 months to make the site operable, which is well beyond the timeframe required to begin removing debris from the impacted area.

4.0 Existing Site Conditions and Environmental Impacts

This section discusses the existing environmental conditions and the environmental impacts associated with establishment and operation of the Barber debris handling facility. Pursuant to NEPA, impacts should be addressed in proportion to their significance (40 CFR § 1502(b)). For the purposes of this analysis, it is anticipated that the following resources require detailed analysis to support the impacts assessment: soil quality; water quality; air quality; noise; traffic; biological resources, including special status species; and cultural and historic resources.

4.1 Soil Quality

As discussed above, soils at the Barber Industrial Site were contaminated with arsenic and PCP. The site underwent a significant remediation which involved removing and disposing of 42,500 cubic yards of contaminated soil. Approximately 32,500 acres of soils contaminated with arsenic remains onsite under an asphalt cap. The cap maintains the soil in place and protects the surrounding environment from contact with the arsenic-laden soil. Subsequent monitoring of the soil has shown that the area was restored to residential criteria.

The site would facility storage, processing, and trans-loading non-hazardous materials. Therefore, soil at the site would not be exposed to hazardous substances which could result in contamination. Storage, processing, and trans-loading would occur on hardened surfaces, which would further

protect soils from incidental contamination or erosion. Further, erosion control best management practices, discussed below, would be implemented to protect soil from erosion and contamination. Implementation of the best management practices identified below will ensure that impacts to soils are less than significant.

- *Soil BMP-1:* Prior establishment and operation of the Barber debris handling facility, a soil erosion and water quality control plan will be prepared. The plan will identify best management practices and measures typical of construction sites to protect soil erosion and water quality. Measures may include, but are not limited to, installation of silt fences, and/or straw wattles.
- *Soil BMP-2:* Prior to using the site, the in-situ soils would be sampled to determine the current concentrations of compounds in the soil. Soil sampling would also be conducted when operation of the site is complete. The soil samples will be used to determine the soil quality at the site prior to returning the site to its owner. Should soil samples indicate that remedial action is required prior to returning the site, the soils would be restored to the conditions in which the site was initially acquired.
- *Soil BMP-3:* The asphalt cap would be fenced in and protected from construction activities. Personnel working at the site would not be allowed to access the site. A safety officer would be onsite at all times to ensure that the asphalt is not accessed by workers. The asphalt site would be made available for Louisiana-Pacific Corporation representatives and the California DTSC for inspection and maintenance as necessary.

4.2 Water Quality

The site is located in an upland area not adjacent to water bodies. However, drainage ditches from the surrounding agricultural field are in the vicinity of the area. A creek is located to the south of the site, more than 700 feet from the southern perimeter of the site. All surface water would be protected by implementing best management practices listed below.

As discussed above, ground water below the site was contaminated with PCP. In 2008, the RWQCB allowed remediated water to be pumped into the aquifer below the site and monitoring of the site occurs at one well twice each year. In addition, per the 1999 deed restriction, groundwater cannot be used without the approval of the California DTSC. The USACE does not intend to use groundwater as part of the proposed project.

In addition to the groundwater issues related to the historic use of the site, there are eight trichloroethylene (TCE) groundwater plumes within the Chico area, including a plume in southern Chico, which includes a portion of the Barber site (Figure 5). The plume is in groundwater beneath a larger portion of the surrounding residential, industrial, and agricultural lands. The plumes were generated by Victor Industries, which manufactured metal and flexible tubing. From 1958 to 1985, Victor Industries used trichloroethylene (TCE) to clean their product-line machinery. The resulting solvent waste was allegedly dumped on the ground outside their manufacturing facility. Releases of these chemicals have contaminated soils and groundwater in the Chico area.

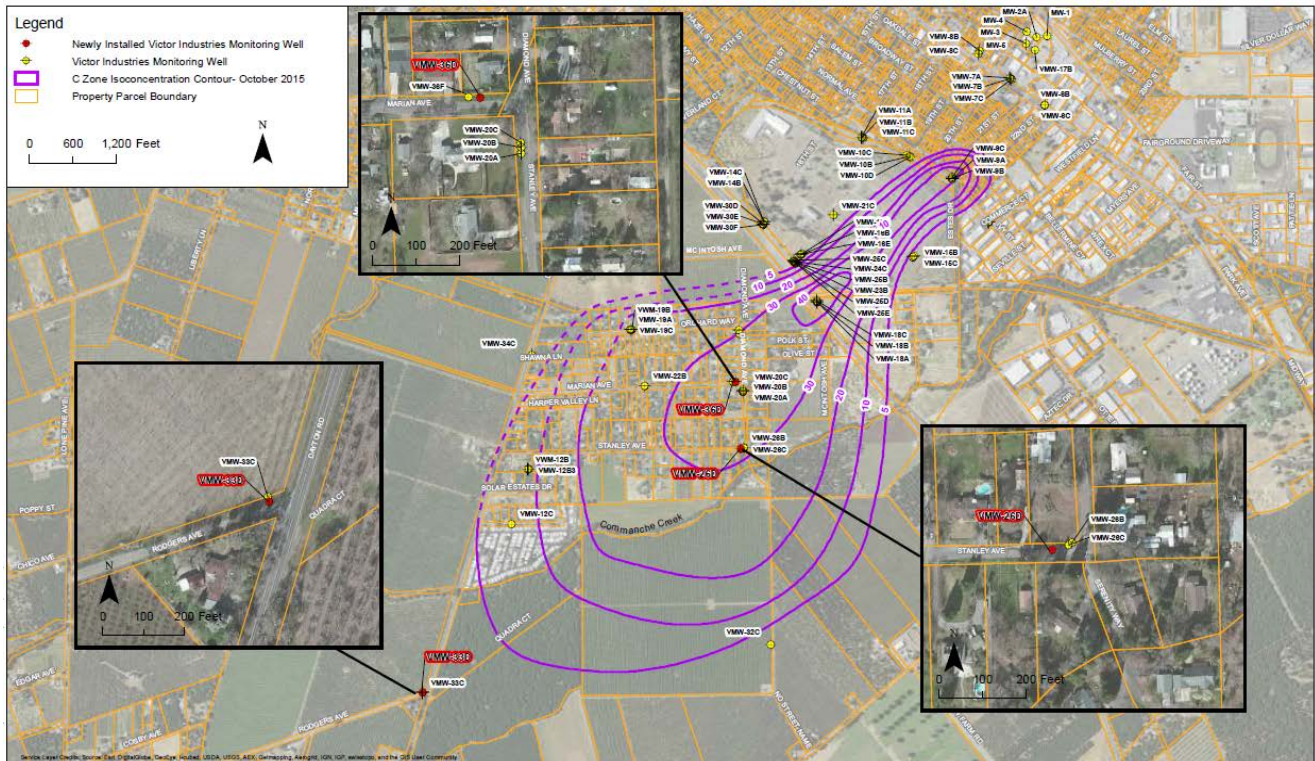


Figure 5. TCE groundwater plume in southern Chico. The groundwater plume is beneath the southern portion of the Barber Industrial Site.

In 1985, the site was stabilized via a Department of Health Services (now DTSC) enforcement action, which resulted in excavating top six inches of contaminated soil. Interim remedial measures were also conducted in 1993 and 1994. Wellhead treatments systems were installed at twelve residences in the Stanley Park area. Between 1993 and 1994, a public drinking water (California Water Services Corporation) line was installed to provide clean, safe water to residences in the Stanley Park area.

- *Water Quality BMP-1:* A stormwater pollution prevention control plan would be prepared and implemented to protect surrounding water courses from runoff.
- *Water Quality BMP-2:* As discussed under *Soil BMP-1* and *Hazardous Substances-1*, a soil erosion and water quality control plan and spill protection and response plan, respectively, will be prepared to protect water quality from other soil erosion, petroleum products, and pollutants.
- *Water Quality BMP-3:* Groundwater resources will not be utilized or affected by construction, operation, or decommissioning and site restoration associated with the proposed action.

Implementation of the proposed water quality best management practices would protect surface and groundwater resources, thereby ensuring that potential impacts to surface and groundwater are less than significant.

4.3 Air Quality

Butte County air quality is in non-attainment for particulate matter (PM) 2.5, PM₁₀, and ozone (state) and PM_{2.5} and 8-hour ozone (federal). Operation of the Barber debris handling facility would generate PM_{2.5} and PM₁₀. However, as a result of the emergency proclamations discussed above, the USACE is not required to obtain a permit for the debris handling facility. Regardless, the USACE is concerned with the potential for PM_{2.5} and PM₁₀ to affect sensitive receptors. As such, the USACE proposes the following best management practices ensure that air quality impacts on sensitive receptors are less than significant:

- *Air Quality BMP-1:* Air quality will be monitored around the perimeter of the Barber site. Air quality will be monitored prior to construction to establish a baseline and during construction and operation of the site to determine impacts to air quality. Should these data indicate that the PM_{2.5} and PM₁₀ are elevated above ambient conditions.
- *Air Quality BMP-2:* An air quality control plan will be developed to identify air quality monitoring requirements and measures to reduce fugitive dust and emissions generated at the Barber site should data indicate PM_{2.5} and PM₁₀ are elevated above ambient condition. Additional practices may include temporarily ceasing particulate matter-generating activities until air quality improves or finding alternative methods for performing required activities that reduce air quality impacts.
- *Air Quality BMP-3:* Air quality data will be made available to the community via the World Wide Web.

4.4 Noise and Vibration

The proposed Barber debris handling facility would generate noise and vibrations that previously did not exist. Most of the noise and vibrations would come from truck traffic entering and exiting the site in the heavy industrial zone, unloading the trucks, moving debris around the site, processing the debris (i.e., crushing concrete and shredding metal), and trans-loading the debris onto rail cars and trucks. Processing the debris is anticipated to generate the highest noise levels; therefore, these activities will be located farther away from sensitive residential receptors. To protect sensitive receptors from elevated noise, the following best management practices will be employed:

- *Noise BMP-1:* As necessary, on-site noise buffers will be constructed to buffer and offset noise.
- *Noise BMP-2:* During the initial stages of utilizing the Barber site, noise will be monitored near the perimeter of the site to determine the noise levels. If noise levels are elevated such

that they could be a nuisance to residents, noise-generating operations, such as crushing and shredding metal, will be limited to the hours of 7:00 am and 7:00 pm. Should noise monitor indicate that operation of the site does not result in excessive noise levels above ambient condition, noise generating activities will likely occur during the night.

Implementing the best management practices to limit noise and vibration production will ensure that impacts to sensitive receptors are less than significant.

4.5 Traffic

As discussed, heavy truck traffic would be routed down Skyway Road, through the heavy industrial area, to the Barber site. Only light-duty vehicles would utilize 16th Street to access the site. While it is expected that a significant number of trucks would be necessary to remove the non-hazardous debris from the impacted area, the use of the industrial zone would minimize impacts to the surrounding community. The USACE will work closely with the State of California, Butte County, and City of Chico to develop a transportation corridor transportation plan to ensure the safety of the community and surrounding resources. While it is expected that the increased traffic could be a nuisance to the community, every effort will be made to mitigate the impacts of traffic, including:

- *Traffic BMP-1:* To the extent practicable, heavy truck traffic would not be allowed in residential areas. All efforts would be made to utilize industrial areas.
- *Traffic BMP-2:* A traffic control plan would be prepared to ensure the safety of the surrounding community. The traffic control plan would be prepared in coordination with the State of California, and FEMA. The City of Chico and Butte County would have an opportunity to review the traffic control plan. The plan would be strictly enforced throughout the duration of the debris removal operations.

While it is acknowledged that traffic impacts are likely to occur through the use of the Barber Site, the impacts in the region are anticipated to occur even if the Barber site were not used. As discussed, it is a priority of the State of California to safely remove the debris from the impacted area. Even under the no action alternative, the state would be responsible for removing the debris, which would result in significant impacts to traffic. The debris handling facility would likely reduce the number of trucks transporting debris from the impacted area, thereby reducing the overall impacts to transportation. Further, with implementation of the traffic best management practices listed above, the impacts to transportation will be less than significant, compared to the no action alternative.

4.6 Cultural and Historic Resources

Two potentially historic structures are present on the site. These include an engineering building and construction building (Figures 6 and 7). An investigation conducted for the site found some documentation identifying the buildings as historic. While a detailed investigation into whether the buildings are eligible for or listed on the National Historic Register was not conducted, the USACE

will treat the buildings as eligible for listing and fully protect them from project impacts. Best management practices identified below will ensure that the buildings are fully protected. Fully protecting the building will ensure that impacts to cultural and historic resources are avoided.

- *Cultural BMP-1:* Fencing will be installed around the buildings and signs will be erected notifying workers that the buildings are considered historic and are not to be disturbed.
- *Cultural BMP-2:* All personnel working on the site will be advised of the historic status of the building and measures intended to protect the buildings.



Figure 6. Engineer building located on the Barber Industrial Site – potentially eligible for listing on the National Register of Historic Places.



Figure 7. Construction building located on the Barber Industrial Site – potentially eligible for listing on the National Register of Historic Places.

4.7 Special Status Species

ESA-Protected Species and Habitat

A United States Fish and Wildlife Service (USFWS) species list was generated on November 24, 2018, using the USFWS' Information for Planning and Consultation [IPaC] website (species list provided as Appendix G). The species list identified eight threatened or endangered species that may be present within the 7.5-minute quadrangle map in which the Barber site is located; critical habitat was not identified on the site. The species include:

- Giant garter snake (*Thamnophis gigas*), threatened
- California red-legged frog (*Rana draytonii*), threatened
- Delta smelt (*Hypomesus transpacificus*), threatened
- Valley elderberry longhorn beetle, (*Desmocerus californicus*), threatened
- Conservancy fairy shrimp (*Branchinecta conservation*), endangered
- Vernal pool fairy shrimp (*Branchinecta lynchi*), threatened
- Vernal pool tadpole shrimp (*Lepidurus packardii*), endangered
- Butte County meadowfoam (*Limnanthes floccose* spp. *californica*), endangered

The above-listed species require aquatic habitat for all or part of their life history. The Barber Industrial Site is a ruderal site that lacks aquatic habitat required for these species. As such, the proposed project would not affect threatened or endangered species.

Migratory Birds

The Barber Industrial Site is located within the Pacific Flyway, which provides habitat for migratory birds. The site is surrounded by agricultural land which may provide foraging habitat for migratory birds. Further, some ruderal trees are present in the interior of the site and almond orchard trees are present along the fence in the southeastern portion of the site. The orchard trees were planted to provide a buffer from the adjacent residential areas to the east. While not certain at this time, migratory birds may utilize the trees for nesting. As discussed in the best management practices below, migratory bird nesting surveys will be conducted at the appropriate times to determine if migratory bird nests are present. Implementing the best management practices will ensure that potential impacts to migratory birds are less than significant.

- *Migratory Birds BMP-1:* A qualified biologist will survey the project area during the nesting season (but prior to the project or action occurring) to determine if migratory birds are present and nesting in those areas. These bird surveys should occur no more than 7-10 days prior to when work actually begins on the project site. In addition to conducting surveys during the nesting season, entities may also benefit from conducting surveys during the previous nesting season. Such surveys will serve to inform the likely presence of nesting migratory birds in the proposed project or work area. If no migratory birds are found nesting in proposed project or action areas immediately prior to the time when construction and associated activities are to occur, then proceed with your project activity as planned.
- *Migratory Birds BMP-2:* If migratory birds are present and nesting in the proposed project area, the United States Fish and Wildlife Service (USFWS) will be contacted for guidance on appropriate next steps to avoid and minimize impacts to (and take of) migratory birds associated with the proposed project or action. Should removal and relocation of the nests be required, all efforts will be coordinated with the USFWS.

4.8 Hazardous Spills

As with any project, there is a potential for hazardous substances to be exposed to the environment through spills. However, this potential is typically mitigated through preparation and implementation of a hazardous spill prevention plan, as identified in below.

- *Hazardous Spills BMP-2:* A hazardous spills prevention plan will be prepared and implemented. The plan will identify best management practices for storing hazardous materials, protecting the environment from spills, and reporting and remediating any spills.

Ensuring that the hazardous spill prevention plan is strictly followed will ensure that hazardous spills are prevented and, should they occur, are contained and immediately cleaned up. Therefore, it is likely that any impacts resulting from potential hazardous spills are less than significant.

4.9 Cumulative Impacts

A survey of past, present, and future projects in the vicinity of the project area was conducted. The projects that will result in cumulative impacts primarily include activities related to the response and recovery efforts in Butte County. However, the fire response and recovery efforts are currently considered the part of the baseline action. Quantifying the significant amount of effort required to recover cover the impacted area and community would be an exhaustive effort that is outside of the scope of this action. Further, the State of California and County of Butte, through their proclamations, have identified fire response and recovery as a priority.

5.0 Public Outreach

Public outreach is a critical component of the NEPA process and an important aspect of the proposed action. As such, the USACE is committed to engaging the community to keep residents informed of debris handling activities. Community outreach will include notifying the community of the proposed project through a notification flyer, community meetings. A community meeting will be held prior to use of the Barber Industrial Site.

To date, community engagement has included:

- December 3, 2018, the USACE, FEMA, California Office of Emergency Services, CalTrans, and CalRecycle met with representatives from the City of Chico, Department of Public Works, to discuss the proposed use of the Barber Industrial Site as a temporary debris handling facility. The group discussed potential ingress and egress routes into the site as well as outreach to the local community.
- December 4, 2018, the USACE and FEMA participated in community meeting to discuss recovery efforts related to the Camp Fire.

6.0 Conclusions

Based on the analysis herein, the USACE believes that the proposed Barber debris handling facility would not result in adverse effects to the environment, particularly compared to the no action alternative. While there will be impacts resulting from utilizing the Barber Industrial Site as a debris handling facility, under the no action alternative, the State of California would be required to identify alternative processing and disposal sites that may result in impacts that are greater than those identified herein. In particular, impacts to transportation and air quality could be greater if the state identifies processing and disposal sites which require additional trucking of debris to a location(s) farther from the impacted area. The Barber site, a former industrial site that is adjacent to an existing rail road spur, offers a solution to quickly and efficiently remove non-hazardous debris from the impacted area and reduces the burden on the state to remove all debris.